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SEQUENCE LISTING

<110> Acton, Susan

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<170> PatentIn Ver. 2.0

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Lys Lys Val Asn Met Ala Leu Gly Phe Ser Asp Phe Asp Leu Ser Glu
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Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu Ser His Arg Asn
 50 55 60

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Val Thr Glu Tyr Ala Ser Leu Gly Ser Leu Tyr Asp Tyr Ile Asn Ser

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	Gly Val Leu Lys Ile Cys Asp Phe Gly Ala Ser Arg Phe His Asn His		
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	Val Ile Gln Ser Leu Pro Val Ser Glu Thr Cys Asp Thr Tyr Ser Tyr		
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	Leu Glu Gly Leu Gln Val Ala Trp Leu Val Val Glu Lys Asn Glu Arg		
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	Ile Ser Ile Leu Glu Ser Met Ser Asn Asp Thr Ser Leu Pro Asp Lys		
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	Ala Thr Leu Glu Arg Leu Lys Lys Leu Glu Arg Asp Leu Ser Phe Lys		
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	His Gly Met Asn Pro Ser Leu Gln Ala Met Met Leu Met Gly Phe Gly		

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	Gln Phe Phe Glu Asn Cys Gly Gly Gly Ser Phe Gly Ser Val Tyr Arg					
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	Ala Lys Trp Ile Ser Gln Asp Lys Glu Val Ala Val Lys Lys Leu Leu					
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	Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu Ser His Arg Asn					
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	Asn Arg Ser Glu Glu Met Asp Met Asp His Ile Met Thr Trp Ala Thr					

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	Arg Met Ser Glu Glu Ser Tyr Phe Glu Ser Lys Thr Glu Glu Ser Asn	
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	Gln Ile Asn Met Gln Ala Lys Gln Asn Ser Ser Lys Thr Thr Ser Lys	
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	Ala Pro Ala Phe Pro Leu Ala Ile Lys Met Met Trp Asn Ile Ser Ala	
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 His Ile Leu Ala Leu Lys Asn Leu Lys Leu Asp Lys Met Val Gly Trp
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Ala Ala Gly Pro Gly Ala Glu Pro Arg Arg Val Gly Leu Gly Leu Pro
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Gln Ala Ile Phe Thr Gln Lys Ser Lys Pro Gly Pro Asp Pro Leu Asp
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Pro Gly Ala Pro Ala Phe Pro Leu Ala Ile Lys Met Met Trp Asn Ile
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 Arg Pro Ser Ala Arg Val Ala Ala Asn Val Leu His Leu Ser Leu Trp
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 Arg Pro Gly Pro Ala Ala Gly Cys Val Arg Gly Glu Arg Pro Gly Trp
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	Ser Ile Gly Lys Gly Cys Ser Ala Ala Val Tyr Glu Ala Thr Met Pro	
	165 170 175	
20	aca ttg ccc cag aac ctg gag gtg aca aag agc acc ggg ttg ctt cca	576
	Thr Leu Pro Gln Asn Leu Glu Val Thr Lys Ser Thr Gly Leu Leu Pro	
	180 185 190	
25	ggg aga ggc cca ggt acc agt gca cca gga gaa ggg cag gag cga gct	624
	Gly Arg Gly Pro Gly Thr Ser Ala Pro Gly Glu Gly Gln Glu Arg Ala	
	195 200 205	
30	ccg ggg gcc cct gcc ttc ccc ttg gcc atc aag atg atg tgg aac atc	672
	Pro Gly Ala Pro Ala Phe Pro Leu Ala Ile Lys Met Met Trp Asn Ile	
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35	tcg gca ggt tcc tcc agc gaa gcc atc ttg aac aca atg agc cag gag	720
	Ser Ala Gly Ser Ser Ser Glu Ala Ile Leu Asn Thr Met Ser Gln Glu	
	225 230 235 240	
40	ctg gtc cca gcg agc cga gtg gcc ttg gct ggg gag tat gga gca gtc	768
	Leu Val Pro Ala Ser Arg Val Ala Leu Ala Gly Glu Tyr Gly Ala Val	
	245 250 255	
45	act tac aga aaa tcc aag aga ggt ccc aag caa cta gcc cct cac ccc	816
	Thr Tyr Arg Lys Ser Lys Arg Gly Pro Lys Gln Leu Ala Pro His Pro	
	260 265 270	
50	aac atc atc cgg gtt ctc cgc gcc ttc acc tct tcc gtg ccg ctg ctg	864
	Asn Ile Ile Arg Val Leu Arg Ala Phe Thr Ser Ser Val Pro Leu Leu	
	275 280 285	
55	cca ggg gcc ctg gtc gac tac cct gat gtg ctg ccc tca cgc etc cac	912
	Pro Gly Ala Leu Val Asp Tyr Pro Asp Val Leu Pro Ser Arg Leu His	
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60	cct gaa ggc ctg ggc cat ggc cgg acg ctg ttc ctc gtt atg aag aac	960
	Pro Glu Gly Leu Gly His Gly Arg Thr Leu Phe Leu Val Met Lys Asn	
	305 310 315 320	
65	tat ccc tgt acc ctg cgc cag tac ctt tgt gtg aac aca ccc agc ccc	1008
	Tyr Pro Cys Thr Leu Arg Gln Tyr Leu Cys Val Asn Thr Pro Ser Pro	

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10	ctg gtt caa cag ggc atc gcg cac aga gac ctg aaa tcc gac aac atc Leu Val Gln Gln Gly Ile Ala His Arg Asp Leu Lys Ser Asp Asn Ile 355 360 365			1104
15	ctt gtg gag ctg gac cca gac ggc tgc ccc tgg ctg gtg atc gca gat Leu Val Glu Leu Asp Pro Asp Gly Cys Pro Trp Leu Val Ile Ala Asp 370 375 380			1152
20	ttt ggc tgc tgc ctg gct gat gag agc atc ggc ctg cag ttg ccc ttc Phe Gly Cys Cys Leu Ala Asp Glu Ser Ile Gly Leu Gln Leu Pro Phe 385 390 395 400			1200
25	agc agc tgg tac gtg gat cgg ggc gga aac ggc tgt ctg atg gcc cca Ser Ser Trp Tyr Val Asp Arg Gly Gly Asn Gly Cys Leu Met Ala Pro 405 410 415			1248
30	gag gtg tcc acg gcc cgt cct ggc ccc agg gca gtg att gac tac agc Glu Val Ser Thr Ala Arg Pro Gly Pro Arg Ala Val Ile Asp Tyr Ser 420 425 430			1296
35	aag gct gat gcc tgg gca gtg gga gcc atc gcc tat gaa atc ttc ggg Lys Ala Asp Ala Trp Ala Val Gly Ala Ile Ala Tyr Glu Ile Phe Gly 435 440 445			1344
40	ctt gtc aat ccc ttc tac ggc cag ggc aag gcc cac ctt gaa agc cgc Leu Val Asn Pro Phe Tyr Gly Gln Gly Lys Ala His Leu Glu Ser Arg 450 455 460			1392
45	agc tac caa gag gct cag cta cct gca ctg ccc gag tca gtg cct cca Ser Tyr Gln Glu Ala Gln Leu Pro Ala Leu Pro Glu Ser Val Pro Pro 465 470 475 480			1440
50	gac gtg aga cag ttg gtg agg gca ctg ctc cag cga gag gcc agc aag Asp Val Arg Gln Leu Val Arg Ala Leu Leu Gln Arg Glu Ala Ser Lys 485 490 495			1488
55	aga cca tct gcc cga gta gcc gca aat gtg ctt cat cta agc ctc tgg Arg Pro Ser Ala Arg Val Ala Ala Asn Val Leu His Leu Ser Leu Trp 500 505 510			1536
60	ggc gaa cat att cta gcc ctg aag aat ctg aag tta gac aag atg gtt Gly Glu His Ile Leu Ala Leu Lys Asn Leu Lys Leu Asp Lys Met Val 515 520 525			1584
65	ggc tgg ctc ctc caa caa tcg gcc gcc act ttg ttg gcc aac agg ctc Gly Trp Leu Leu Gln Gln Ser Ala Ala Thr Leu Leu Ala Asn Arg Leu 530 535 540			1632

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Thr Glu Lys Cys Cys Val Glu Thr Lys Met Lys Met Leu Phe Leu Ala
545                    550                    555                    560

5  aac ctg gag tgt gaa acg ctc tgc cag gca gcc ctc ctc ctc tgc tca 1728
   Asn Leu Glu Cys Glu Thr Leu Cys Gln Ala Ala Leu Leu Leu Cys Ser
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30  ggctgtgttg ctgggagcct tccagctccc tgcagcagtc atggggcagg gttccccgag 240
   tccgtaatcc ccatttccac ctactttccc ttag tta ttt gat tcc ctg tct gtc 295
                        Leu Phe Asp Ser Leu Ser Val
                        1                    5

35  gta ctc agc tta agt gga gca tcc cct ttc ctg gga gac acg aag cag 343
   Val Leu Ser Leu Ser Gly Ala Ser Pro Phe Leu Gly Asp Thr Lys Gln
                        10                    15                    20

40  gaa aca ctg gca aat atc aca gca gtg agt tac gac ttt gat gag gaa 391
   Glu Thr Leu Ala Asn Ile Thr Ala Val Ser Tyr Asp Phe Asp Glu Glu
                        25                    30                    35

   ttc ttc agc cag acg agc gag ctg gcc aag gac ttt att cgg aag ctt 439
45  Phe Phe Ser Gln Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Lys Leu
   40                    45                    50                    55

   ctg gtt aaa gag acc cgg aaa cgg ctc aca atc caa gag gct ctc aga 487
50  Leu Val Lys Glu Thr Arg Lys Arg Leu Thr Ile Gln Glu Ala Leu Arg
                        60                    65                    70

   cac ccc tgg atc acg ccg gtg gac aac cag caa gcc atg gtg cgc agg 535
   His Pro Trp Ile Thr Pro Val Asp Asn Gln Gln Ala Met Val Arg Arg
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gag tct gtg gtc aat ctg gag aac ttc agg aag cag tat gtc cgc agg 583
 Glu Ser Val Val Asn Leu Glu Asn Phe Arg Lys Gln Tyr Val Arg Arg
 90 95 100

5 cgg tgg aag ctt tcc ttc agc atc gtg tcc ctg tgc aac cac ctc acc 631
 Arg Trp Lys Leu Ser Phe Ser Ile Val Ser Leu Cys Asn His Leu Thr
 105 110 115

10 cgc tgc ctg atg aag aag gtg cac ctg agg ccg gat gag gac ctg agg 679
 Arg Ser Leu Met Lys Lys Val His Leu Arg Pro Asp Glu Asp Leu Arg
 120 125 130 135

15 aac tgt gag agt gac act gag gag gac atc gcc agg agg aaa gcc ctc 727
 Asn Cys Glu Ser Asp Thr Glu Glu Asp Ile Ala Arg Arg Lys Ala Leu
 140 145 150

20 cac cca cgg agg agg agc agc acc tcc taactggcct gacctgcagt 774
 His Pro Arg Arg Arg Ser Ser Thr Ser
 155 160

ggccgccagg gaggtctggg ccagcgggg ctcccttctg tgcagacttt tggaccacgc 834

25 tcagcaccag caccggggcg tcttgagcac ttgcaagag agatggggcc aaggaattca 894

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30 tcagagtctg ggggtgggagt gtggacttag gaaaacaata taaaggacat cctcatcatc 1074

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35 aaagtgaacc ttgggtgtga gggaccaatc ctgtgacctc ccagaaccat ggaagccagg 1254

acgtcaggct gaccaacacc tcagaccttc tgaagcagcc cattgctggc ccgccatggt 1314

40 gtaattttgc tcatttttat taaacttctg gtttacctga tgcttggett ctttttagggc 1374

taccctcatc tcatttctt tagccctgtg gctgttaact ctgagggggg gcaccacagt 1434

ggggtgctgag tgggcagaat ctgagaagg cctcctgaac cgtccgcgca ggcctgcagt 1494

45 gggcctgect cctccttgct tccctaacag gaagggtgcc agttcaagag aaccacacca 1554

gagactggga gtgggtggctc acgcctataa tccctgcgtt ttggcagtcg gaggcagggg 1614

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gggcggccgc 1864

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 20 25 30

20 Ser Tyr Asp Phe Asp Glu Glu Phe Phe Ser Gln Thr Ser Glu Leu Ala
 35 40 45

Lys Asp Phe Ile Arg Lys Leu Leu Val Lys Glu Thr Arg Lys Arg Leu
 50 55 60

25 Thr Ile Gln Glu Ala Leu Arg His Pro Trp Ile Thr Pro Val Asp Asn
 65 70 75 80

Gln Gln Ala Met Val Arg Arg Glu Ser Val Val Asn Leu Glu Asn Phe
 85 90 95

30 Arg Lys Gln Tyr Val Arg Arg Arg Trp Lys Leu Ser Phe Ser Ile Val
 100 105 110

35 Ser Leu Cys Asn His Leu Thr Arg Ser Leu Met Lys Lys Val His Leu
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Arg Pro Asp Glu Asp Leu Arg Asn Cys Glu Ser Asp Thr Glu Glu Asp
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	1				5					10					15		
	ttc	ctg	gga	gac	acg	aag	cag	gaa	aca	ctg	gca	aat	atc	aca	gca	gtg	96
5	Phe	Leu	Gly	Asp	Thr	Lys	Gln	Glu	Thr	Leu	Ala	Asn	Ile	Thr	Ala	Val	
				20					25					30			
	agt	tac	gac	ttt	gat	gag	gaa	ttc	ttc	agc	cag	acg	agc	gag	ctg	gcc	144
10	Ser	Tyr	Asp	Phe	Asp	Glu	Glu	Phe	Phe	Ser	Gln	Thr	Ser	Glu	Leu	Ala	
			35					40					45				
	aag	gac	ttt	att	cgg	aag	ctt	ctg	gtt	aaa	gag	acc	cgg	aaa	cgg	ctc	192
	Lys	Asp	Phe	Ile	Arg	Lys	Leu	Leu	Val	Lys	Glu	Thr	Arg	Lys	Arg	Leu	
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15	aca	atc	caa	gag	gct	ctc	aga	cac	ccc	tgg	atc	acg	ccg	gtg	gac	aac	240
	Thr	Ile	Gln	Glu	Ala	Leu	Arg	His	Pro	Trp	Ile	Thr	Pro	Val	Asp	Asn	
			65				70				75					80	
20	cag	caa	gcc	atg	gtg	cgc	agg	gag	tct	gtg	gtc	aat	ctg	gag	aac	ttc	288
	Gln	Gln	Ala	Met	Val	Arg	Arg	Glu	Ser	Val	Val	Asn	Leu	Glu	Asn	Phe	
					85					90					95		
	agg	aag	cag	tat	gtc	cgc	agg	cgg	tgg	aag	ctt	tcc	ttc	agc	atc	gtg	336
25	Arg	Lys	Gln	Tyr	Val	Arg	Arg	Arg	Trp	Lys	Leu	Ser	Phe	Ser	Ile	Val	
				100					105					110			
	tcc	ctg	tgc	aac	cac	ctc	acc	cgc	tgc	ctg	atg	aag	aag	gtg	cac	ctg	384
	Ser	Leu	Cys	Asn	His	Leu	Thr	Arg	Ser	Leu	Met	Lys	Lys	Val	His	Leu	
30			115					120					125				
	agg	ccg	gat	gag	gac	ctg	agg	aac	tgt	gag	agt	gac	act	gag	gag	gac	432
	Arg	Pro	Asp	Glu	Asp	Leu	Arg	Asn	Cys	Glu	Ser	Asp	Thr	Glu	Glu	Asp	
			130				135					140					
35	atc	gcc	agg	agg	aaa	gcc	ctc	cac	cca	cgg	agg	agg	agc	agc	acc	tcc	480
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		1					5				10				15		

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	Arg Pro Met Lys Lys Val Thr Asp Tyr Ser Ser Ser Ser Glu Glu Ser	
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	Glu Ser Ser Glu Glu Glu Glu Glu Asp Gly Glu Ser Glu Thr His Asp	
	35 40 45	
10	ggg aca gtg gct gtc agc gac ata ccc aga ctg ata cca aca gga gct	193
	Gly Thr Val Ala Val Ser Asp Ile Pro Arg Leu Ile Pro Thr Gly Ala	
	50 55 60	
15	cca ggc agc aac gag cag tac aat gtg gga atg gtg ggg acg cat ggg	241
	Pro Gly Ser Asn Glu Gln Tyr Asn Val Gly Met Val Gly Thr His Gly	
	65 70 75 80	
20	ctg gag acc tct cat gcg gac agt ttc agc ggc agt att tca aga gaa	289
	Leu Glu Thr Ser His Ala Asp Ser Phe Ser Gly Ser Ile Ser Arg Glu	
	85 90 95	
25	gga acc ttg atg att aga gag acg tct gga gag aag aag cga tct ggc	337
	Gly Thr Leu Met Ile Arg Glu Thr Ser Gly Glu Lys Lys Arg Ser Gly	
	100 105 110	
30	cac agt gac agc aat ggc ttt gct ggc cac atc aac ctc cct gac ctg	385
	His Ser Asp Ser Asn Gly Phe Ala Gly His Ile Asn Leu Pro Asp Leu	
	115 120 125	
35	gtg cag cag agc cat tct cca gct gga acc ccg act gag gga ctg ggg	433
	Val Gln Gln Ser His Ser Pro Ala Gly Thr Pro Thr Glu Gly Leu Gly	
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40	cgc gtc tca acc cat tcc cag gag atg gac tct ggg act gaa tat ggc	481
	Arg Val Ser Thr His Ser Gln Glu Met Asp Ser Gly Thr Glu Tyr Gly	
	145 150 155 160	
45	atg ggg agc agc acc aaa gcc tcc ttc acc ccc ttt gtg gac ccc aga	529
	Met Gly Ser Ser Thr Lys Ala Ser Phe Thr Pro Phe Val Asp Pro Arg	
	165 170 175	
50	gta tac cag acg tct ccc act gat gaa gat gaa gag gat gag gaa tca	577
	Val Tyr Gln Thr Ser Pro Thr Asp Glu Asp Glu Glu Asp Glu Glu Ser	
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	Ser Ala Ala Ala Leu Phe Thr Ser Glu Leu Leu Arg Gln Glu Gln Ala	
	195 200 205	
60	aaa ctc aat gaa gca aga aag att tcg gtg gta aat gta aac cca acc	673
	Lys Leu Asn Glu Ala Arg Lys Ile Ser Val Val Asn Val Asn Pro Thr	
	210 215 220	
65	aac att cgg cct cat agc gac aca cca gaa atc aga aaa tac aag aaa	721
	Asn Ile Arg Pro His Ser Asp Thr Pro Glu Ile Arg Lys Tyr Lys Lys	

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	225		230		235		240	
	cga ttc aac tca gaa ata ctt tgt gca gct ctg tgg ggt gta aac ctt							769
5	Arg Phe Asn Ser Glu Ile Leu Cys Ala Ala Leu Trp Gly Val Asn Leu	245		250		255		
	ctg gtg ggg act gaa aat ggc ctg atg ctt ttg gac cga agt ggg caa							817
	Leu Val Gly Thr Glu Asn Gly Leu Met Leu Leu Asp Arg Ser Gly Gln	260		265		270		
10	ggc aaa gtc tat aat ctg atc aac cgg agg cga ttt cag cag atg gat							865
	Gly Lys Val Tyr Asn Leu Ile Asn Arg Arg Arg Phe Gln Gln Met Asp	275		280		285		
15	gtg cta gag gga ctg aat gtc ctt gtg aca att tca gga aag aag aat							913
	Val Leu Glu Gly Leu Asn Val Leu Val Thr Ile Ser Gly Lys Lys Asn	290		295		300		
20	aag cta cga gtt tac tat ctt tca tgg tta aga aac aga ata cta cat							961
	Lys Leu Arg Val Tyr Tyr Leu Ser Trp Leu Arg Asn Arg Ile Leu His	305		310		315		320
25	aat gac cca gaa gta gaa aag aaa caa ggc tgg atc act gtt ggg gac							1009
	Asn Asp Pro Glu Val Glu Lys Lys Gln Gly Trp Ile Thr Val Gly Asp	325		330		335		
30	ttg gaa ggc tgt ata cat tat aaa gtt gtt aaa tat gaa agg atc aaa							1057
	Leu Glu Gly Cys Ile His Tyr Lys Val Val Lys Tyr Glu Arg Ile Lys	340		345		350		
35	ttt ttg gtg att gcc tta aag aat gct gtg gaa ata tat gct tgg gct							1105
	Phe Leu Val Ile Ala Leu Lys Asn Ala Val Glu Ile Tyr Ala Trp Ala	355		360		365		
40	cct aaa ccg tat cat aaa ttc atg gca ttt aag tct ttt gca gat ctc							1153
	Pro Lys Pro Tyr His Lys Phe Met Ala Phe Lys Ser Phe Ala Asp Leu	370		375		380		
45	cag cac aag cct ctg cta gtt gat ctc acg gta gaa gaa ggt caa aga							1201
	Gln His Lys Pro Leu Leu Val Asp Leu Thr Val Glu Glu Gly Gln Arg	385		390		395		400
50	tta aag gtt att ttt ggt tca cac act ggt ttc cat gta att gat gtt							1249
	Leu Lys Val Ile Phe Gly Ser His Thr Gly Phe His Val Ile Asp Val	405		410		415		
55	gat tca gga aac tct tat gat atc tac ata cca tct cat att cag ggc							1297
	Asp Ser Gly Asn Ser Tyr Asp Ile Tyr Ile Pro Ser His Ile Gln Gly	420		425		430		
60	aat atc act cct cat gct att gtc atc ttg cct aaa							1333
	Asn Ile Thr Pro His Ala Ile Val Ile Leu Pro Lys	435		440				

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 5 <213> Homo sapiens

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 35 40 45
 Gly Thr Val Ala Val Ser Asp Ile Pro Arg Leu Ile Pro Thr Gly Ala
 50 55 60
 20 Pro Gly Ser Asn Glu Gln Tyr Asn Val Gly Met Val Gly Thr His Gly
 65 70 75 80
 Leu Glu Thr Ser His Ala Asp Ser Phe Ser Gly Ser Ile Ser Arg Glu
 85 90 95
 25 Gly Thr Leu Met Ile Arg Glu Thr Ser Gly Glu Lys Lys Arg Ser Gly
 100 105 110
 His Ser Asp Ser Asn Gly Phe Ala Gly His Ile Asn Leu Pro Asp Leu
 115 120 125
 30 Val Gln Gln Ser His Ser Pro Ala Gly Thr Pro Thr Glu Gly Leu Gly
 130 135 140
 35 Arg Val Ser Thr His Ser Gln Glu Met Asp Ser Gly Thr Glu Tyr Gly
 145 150 155 160
 Met Gly Ser Ser Thr Lys Ala Ser Phe Thr Pro Phe Val Asp Pro Arg
 165 170 175
 40 Val Tyr Gln Thr Ser Pro Thr Asp Glu Asp Glu Glu Asp Glu Glu Ser
 180 185 190
 Ser Ala Ala Ala Leu Phe Thr Ser Glu Leu Leu Arg Gln Glu Gln Ala
 195 200 205
 45 Lys Leu Asn Glu Ala Arg Lys Ile Ser Val Val Asn Val Asn Pro Thr
 210 215 220
 50 Asn Ile Arg Pro His Ser Asp Thr Pro Glu Ile Arg Lys Tyr Lys Lys
 225 230 235 240
 Arg Phe Asn Ser Glu Ile Leu Cys Ala Ala Leu Trp Gly Val Asn Leu
 245 250 255

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Leu Val Gly Thr Glu Asn Gly Leu Met Leu Leu Asp Arg Ser Gly Gln
260 265 270

5 Gly Lys Val Tyr Asn Leu Ile Asn Arg Arg Arg Phe Gln Gln Met Asp
275 280 285

Val Leu Glu Gly Leu Asn Val Leu Val Thr Ile Ser Gly Lys Lys Asn
290 295 300

10 Lys Leu Arg Val Tyr Tyr Leu Ser Trp Leu Arg Asn Arg Ile Leu His
305 310 315 320

Asn Asp Pro Glu Val Glu Lys Lys Gln Gly Trp Ile Thr Val Gly Asp
15 325 330 335

Leu Glu Gly Cys Ile His Tyr Lys Val Val Lys Tyr Glu Arg Ile Lys
340 345 350

20 Phe Leu Val Ile Ala Leu Lys Asn Ala Val Glu Ile Tyr Ala Trp Ala
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Pro Lys Pro Tyr His Lys Phe Met Ala Phe Lys Ser Phe Ala Asp Leu
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25 Gln His Lys Pro Leu Leu Val Asp Leu Thr Val Glu Glu Gly Gln Arg
385 390 395 400

Leu Lys Val Ile Phe Gly Ser His Thr Gly Phe His Val Ile Asp Val
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Arg Pro Met Lys Lys Val Thr Asp Tyr Ser Ser Ser Ser Glu Glu Ser

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	50	55	60	
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	65	70	75	80
20	ctg gag acc tct cat gcg gac agt ttc agc ggc agt att tca aga gaa Leu Glu Thr Ser His Ala Asp Ser Phe Ser Gly Ser Ile Ser Arg Glu	288		
	85	90	95	
25	gga acc ttg atg att aga gag acg tct gga gag aag aag cga tct ggc Gly Thr Leu Met Ile Arg Glu Thr Ser Gly Glu Lys Lys Arg Ser Gly	336		
	100	105	110	
30	cac agt gac agc aat ggc ttt gct ggc cac atc aac ctc cct gac ctg His Ser Asp Ser Asn Gly Phe Ala Gly His Ile Asn Leu Pro Asp Leu	384		
	115	120	125	
35	gtg cag cag agc cat tct cca gct gga acc ccg act gag gga ctg ggg Val Gln Gln Ser His Ser Pro Ala Gly Thr Pro Thr Glu Gly Leu Gly	432		
	130	135	140	
40	cgc gtc tca acc cat tcc cag gag atg gac tct ggg act gaa tat ggc Arg Val Ser Thr His Ser Gln Glu Met Asp Ser Gly Thr Glu Tyr Gly	480		
	145	150	155	160
45	atg ggg agc agc acc aaa gcc tcc ttc acc ccc ttt gtg gac ccc aga Met Gly Ser Ser Thr Lys Ala Ser Phe Thr Pro Phe Val Asp Pro Arg	528		
	165	170	175	
50	gta tac cag acg tct ccc act gat gaa gat gaa gag gat gag gaa tca Val Tyr Gln Thr Ser Pro Thr Asp Glu Asp Glu Glu Asp Glu Glu Ser	576		
	180	185	190	
55	tca gcc gca gct ctg ttt act agc gaa ctt ctt agg caa gaa cag gcc Ser Ala Ala Ala Leu Phe Thr Ser Glu Leu Leu Arg Gln Glu Gln Ala	624		
	195	200	205	
60	aaa ctc aat gaa gca aga aag att tcg gtg gta aat gta aac cca acc Lys Leu Asn Glu Ala Arg Lys Ile Ser Val Val Asn Val Asn Pro Thr	672		
	210	215	220	
65	aac att cgg cct cat agc gac aca cca gaa atc aga aaa tac aag aaa Asn Ile Arg Pro His Ser Asp Thr Pro Glu Ile Arg Lys Tyr Lys Lys	720		
	225	230	235	240

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	cga ttc aac tca gaa ata ctt tgt gca gct ctg tgg ggt gta aac ctt	768
	Arg Phe Asn Ser Glu Ile Leu Cys Ala Ala Leu Trp Gly Val Asn Leu	
	245 250 255	
5	ctg gtg ggg act gaa aat ggc ctg atg ctt ttg gac cga agt ggg caa	816
	Leu Val Gly Thr Glu Asn Gly Leu Met Leu Leu Asp Arg Ser Gly Gln	
	260 265 270	
10	ggc aaa gtc tat aat ctg atc aac cgg agg cga ttt cag cag atg gat	864
	Gly Lys Val Tyr Asn Leu Ile Asn Arg Arg Arg Phe Gln Gln Met Asp	
	275 280 285	
15	gtg cta gag gga ctg aat gtc ctt gtg aca att tca gga aag aag aat	912
	Val Leu Glu Gly Leu Asn Val Leu Val Thr Ile Ser Gly Lys Lys Asn	
	290 295 300	
20	aag cta cga gtt tac tat ctt tca tgg tta aga aac aga ata cta cat	960
	Lys Leu Arg Val Tyr Tyr Leu Ser Trp Leu Arg Asn Arg Ile Leu His	
	305 310 315 320	
25	aat gac cca gaa gta gaa aag aaa caa ggc tgg atc act gtt ggg gac	1008
	Asn Asp Pro Glu Val Glu Lys Lys Gln Gly Trp Ile Thr Val Gly Asp	
	325 330 335	
30	ttg gaa ggc tgt ata cat tat aaa gtt gtt aaa tat gaa agg atc aaa	1056
	Leu Glu Gly Cys Ile His Tyr Lys Val Val Lys Tyr Glu Arg Ile Lys	
	340 345 350	
35	ttt ttg gtg att gcc tta aag aat gct gtg gaa ata tat gct tgg gct	1104
	Phe Leu Val Ile Ala Leu Lys Asn Ala Val Glu Ile Tyr Ala Trp Ala	
	355 360 365	
40	cct aaa ccg tat cat aaa ttc atg gca ttt aag tct ttt gca gat ctc	1152
	Pro Lys Pro Tyr His Lys Phe Met Ala Phe Lys Ser Phe Ala Asp Leu	
	370 375 380	
45	cag cac aag cct ctg cta gtt gat ctc acg gta gaa gaa ggt caa aga	1200
	Gln His Lys Pro Leu Leu Val Asp Leu Thr Val Glu Glu Gly Gln Arg	
	385 390 395 400	
50	tta aag gtt att ttt ggt tca cac act ggt ttc cat gta att gat gtt	1248
	Leu Lys Val Ile Phe Gly Ser His Thr Gly Phe His Val Ile Asp Val	
	405 410 415	
55	gat tca gga aac tct tat gat atc tac ata cca tct cat att cag ggc	1296
	Asp Ser Gly Asn Ser Tyr Asp Ile Tyr Ile Pro Ser His Ile Gln Gly	
	420 425 430	
60	aat atc act cct cat gct att gtc atc ttg cct aaa	1332
	Asn Ile Thr Pro His Ala Ile Val Ile Leu Pro Lys	
	435 440	